

Before the
Federal Communications Commission
Washington, D.C.

In the Matter of)	
)	
Revision of Part 15)	
of the Commission's Rules Regarding)	ET Docket No. 98-153
Ultra-Wideband Transmission Systems)	

REPLY COMMENTS OF WORLDCOM, INC.

WorldCom, Inc. ("WorldCom") hereby submits its Reply Comments in response to the Comments filed in the Commission's *Notice of Proposed Rule Making*¹ in the above-referenced proceeding. In its *Notice*, the Commission sought comment on its proposal to amend Part 15 of the Commission's Rules to allow for the introduction of new products incorporating ultra-wideband ("UWB") technology.

WorldCom is one of the largest providers of multi-channel multi-point distribution service ("MMDS") in the United States. MMDS is a fixed wireless broadband service which operates primarily in the 2.5 – 2.7 GHz band. Because this is part of the spectrum that will be used by UWB devices, WorldCom is concerned that UWB services might interfere with its MMDS operations.

¹ *Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems*, ET Docket 98-153, *Notice of Proposed Rule Making*, FCC 00-163, Released May 11, 2000 ("Notice").

I. WorldCom Urges the Commission to Condition Any Authorization of UWB Devices on the Avoidance of Harmful Interference to Existing Services

WorldCom agrees with those commenters who commend the Commission for its efforts to promote progress through the authorization of new technologies, but who also urge the Commission to proceed with caution in the authorization of UWB technologies and ensure that existing services are protected from interference.² The Commission's *Notice* will lead to the establishment of rules which will allow the development and introduction of new products incorporating UWB technologies. These technologies have applications in numerous industries, including safety, health, communications, and construction. Although these industries will no doubt use UWB for beneficial purposes, WorldCom shares the concerns expressed by many commenters that products employing UWB technologies can cause harmful interference to existing services.

In its *Notice*, the Commission proposed to allow UWB devices to operate on an unlicensed basis and to share spectrum with other services. While this could be an efficient use of spectrum, it also has the potential to cause interference to those licensed and unlicensed services already operating in the affected bands. WorldCom is primarily concerned that UWB services will interfere with its MMDS operations. MMDS is a fixed wireless broadband service which operates primarily in the 2.5 – 2.7 GHz band. WorldCom holds licenses to provide MMDS service in 160 markets, and has recently applied for authorization to provide two-way MMDS service in over 60 of those markets.

Under the Commission's proposal, UWB providers would be permitted to use the same spectrum used by WorldCom's MMDS operations. MMDS systems are highly

² Comments of Nortel Networks Inc., Metricom, Inc., and The Boeing Company.

susceptible to disruption from interference because they are not designed to withstand more than minimal amounts of interference. In addition, since little is known about the type or extent of interference which may be caused by UWB devices, protecting MMDS systems from UWB interference would be a difficult and expensive task.

As a result, WorldCom supports those commenters who urge the Commission to condition any authorization of UWB devices on the avoidance of interference with existing services. As Nortel Networks states in its Comments, UWB devices “should not be introduced at the cost of harmful interference to current and future communications services.”³ Interference with WorldCom’s MMDS services by UWB devices would greatly reduce the reliability of its services and disrupt the service on which its subscribers rely.

II. WorldCom Supports Those Commenters Who Advocate Completion of Testing Before the Commission Issues Rules on UWB

WorldCom agrees with the Commission’s statement that “further testing and analysis is needed before the risks of interference are completely understood.”⁴

WorldCom’s analysis of the commenters’ technical reports indicates that there is a definite potential for interference with its MMDS services by UWB devices. In order to fully understand the extent and nature of this interference, however, additional testing and analysis are required. WorldCom agrees with the many commenters who supported additional testing, and notes that several of these commenters were governmental agencies which are tasked with protecting and promoting the public interest. For

³ See Nortel Networks Inc. Comments at page 9.

⁴ Notice, paragraph 1.

example, the U.S. Department of Transportation concluded that "... until test data are digested, translated into protective technical criteria, and then into regulatory provisions, the risk of interference precludes unfettered use of UWB technology."⁵

WorldCom also supports commenters, such as Nortel Networks and Qualcomm Incorporated, who believe that the Commission should not amend its Rules until the studies are completed and the public has been afforded the opportunity to comment on the test results.⁶ Qualcomm urges the Commission not to act in this proceeding "until it has a complete record containing reliable, suitable, and sufficient testing and analysis of the potential for interference from UWB devices..."⁷ The Commission must have a complete record which has been subject to public review before it can formulate rules which will be supportive of new services, while protecting existing services.

IV. Conclusion

WorldCom submits that, although UWB technologies may have certain beneficial applications, they also have the potential to interfere with existing services. In order to fully understand the potential interference, UWB technologies must be tested thoroughly, and these tests must be studied carefully before the Commission issues any rules authorizing public use of UWB devices. In addition, any rules issued by the Commission must require that UWB devices avoid interfering with existing services.

Respectfully submitted,

⁵ See Comments of United States Department of Transportation at page 2.

⁶ See Comments of Nortel Networks Inc. at page 2; Qualcomm Incorporated Comments at page 5.

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⁷ See Qualcomm Incorporated Comments at page 5.

CERTIFICATE OF SERVICE

I, LaChelle Carpenter, hereby certify that I have this 27th day of October, 2000, sent a copy of the foregoing "Reply Comments" by first-class, U.S. mail, postage prepaid to the following:

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